

REMARKS

I. Introduction

By the present Amendment, claims 1, 3, 5-8, 11, 15, 17, 18, and 20 have been amended. No claims have been added or cancelled. Accordingly, claims 1-3, 5-9, and 11-20 remain pending in the application. Claims 1 and 17 are independent.

II. Request for Interview

Prior to issuance of an Office Action, Applicants respectfully request that the Examiner contact the undersigned to discuss and/or clarify the claims in a manner that would advance prosecution of the application.

III. Office Action Summary

In the Office Action of September 15, 2010, claims 1-3, 5-9, and 11-20 were rejected under 35 USC §112, second paragraph, as being indefinite. Claims 1-3, 5-9, and 11-20 were rejected under 35 USC §112, first paragraph, as failing to comply with the enablement requirement. Claims 1-3 and 5-20 were rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 7,044,913 issued to Shiki et al. ("Shiki") in view of U.S. Patent No. 6,116,244 issued to Hossack et al. ("Hossack"), and further in view of U.S. Patent No. 6,239,796 issued to Alexander et al. ("Alexander"). This rejection is respectfully traversed.

IV. Rejections under 35 USC §112

Claims 1-3, 5-9, and 11-20 were rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Regarding this rejection, the Office Action indicates that claim 1 states "wherein the transparency control means selects

one of the transparency color bars.. ." and that this language is implying that there is more than one transparency control bar. The Office Action further indicated that Specification suggests that there are more than one color bars such as the luminance/hue color bar and the transparency color bar of which the user makes a selection to utilize, but not multiple transparency color bars. Applicants respectfully disagree.

The Specification discloses the availability of multiple transparency color bars. For example, the transparency color bar (54) illustrated in Fig. 5 is indicated as being one example, and that the transparency control means can select a different transparency color bar. As such, there may be a transparency color bar which increases in transparency for a portion where the variance is relatively small and reduced in transparency (increased in opaqueness) for a portion where the variance is increased as compared to the transparency color bar (54) illustrated in Fig. 5. The transparency control means 3A is therefore capable of selecting one of the transparency color bars which varies in proportion of transparency change in accordance with the variance. See paragraph [0028] of the Published Application.

Applicants respectfully submit that this disclosure supports the availability of multiple transparency color bars.

Claims 1-3, 5-9, and 11-20 were rejected under 35 USC §112, first paragraph, as failing to comply with the enablement requirement. Regarding this rejection, the Office Action indicates that the claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. In particular, the Office Action indicates that various issues are raised regarding the relationship of the transparency control means and the image processing means.

The Office Action further indicated that it is unclear whether Applicants are claiming a means for (or step for) plus function limitation because of the manner in which the claims are recited.

By the present Amendment, Applicants have amended the claims to better clarify the invention as well as relationship between the transparency control means and the image processing means. Specifically, Applicants have modified the claim language to clearly identify instances where 35 USC §112, sixth paragraph may be invoked while retaining language that is supported by sufficient structure in the Disclosure.

Additionally, independent claim 1 has been amended, for example to indicate that one or both of a luminance/hue color bar and/or a transparency color bar from a plurality of transparency color bars can be selected in order to displaying the luminance/hue color bar and/or the transparency color bar on the display means. The means for controlling a degree of transparency is also clarified as being element which changes the relationship between the transparency and the variance, and changes the degree of transparency of the color Doppler image based on the changed relationship in accordance with the one transparency color bar that has been selected. The image processing means then causes the color Doppler image to be displayed transparently, based on the changed degree of transparency.

Based on the foregoing, Applicants respectfully submit the presently pending claims satisfy the requirements of 35 USC §112, first paragraph. Withdrawal of this rejection is therefore respectfully requested.

V. Rejections under 35 USC §103

Claims 1-3 and 5-20 were rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 7,044,913 issued to Shiki, in view of Hossack, and further in view of Alexander. Regarding this rejection, the Office Action suggests that the claims had not been appropriately amended to clearly define the invention and resolve the issues raised under 35 USC §112, first paragraph. Consequently, the rejection under 35 USC §103(a) was within the broadest reasonable interpretation of the claims.

As discussed above, Applicants believe that the claims have been sufficiently amended to clarify the invention and resolve all issues under 35 USC §112. Accordingly, this particular ground of rejection is believed to have been rendered moot.

Withdrawal of this rejection is therefore respectfully requested.

VI. Conclusion

For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 529.45793X00).

Respectfully submitted,
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